

ABSTRACT OF THE DISCLOSURE

A motion vector detecting device and a motion vector detecting method are provided which can efficiently detect the motion vector even when the chrominance information is dominant in the image. When a mode signal (SM) indicates a chrominance signal mode, an input unit (2) outputs, to an operational unit (1), template block data and search window data in which n pieces of chrominance pixel data (Cb) and n pieces of chrominance pixel data (Cr) alternate with each other. On the basis of the data obtained from the input unit (2), the operational unit (1) calculates three evaluation values (ESa, ESo, ESe) about displacement vectors corresponding to one template block.

When the mode signal (SM) indicates the chrominance signal mode, a comparator unit (3) checks the three evaluation values, and when the displacement vector has an odd horizontal vector, it judges that the three evaluation values corresponding to that displaced block are invalid, and it generates three motion vectors (MVa, MVe, MVo) on the basis of the three evaluation values judged to be valid corresponding to displacement vectors.